

Inbound Email Configuration for Offline Approvals



Applies to:

SAP NW2004s (700) SRM 5.00

For more information, visit the [Supplier Relationship Management homepage](#).

Summary

A functional requirement of the shopping cart approval workflow in SRM was to enable External (Offline) Approval of New Candidate Job Requests. When new shopping carts are created, an email is generated from the SRM system and is sent to identified job approver(s). The action to approve or deny the request is done directly within the email and triggers a reply message that is routed back to SRM for processing. Inbound SMTP configuration is required to handle delivery of reply messages to the SRM system on a specific port in order to automate the denial or approval transaction. Proper inbound SMTP routing requires establishing an external MX (Mail eXchanger) record, setting up DNS for routing to the email gateway, and configuration of the email gateway to act as a mail relay sending directly to the internal SRM host using the required port.

This document highlights the technical steps required in order to configure approvals by an external email system. Most of these steps are normally performed via SAP Basis resource. Certain steps, like setting up the users, require involvement from the security team.

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Created on: 28 October 2008

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Prerequisites

- ABAP Based SAP Web Application Server 620 and higher.
- SAP Web Application Server can directly communicate with SMTP server requiring no Gateway.
- SMTP Server with its IP or load balanced hostname.

Step 1. Configuration of Profile Parameters

→ Adjust the profile Parameters

- `icm/server_port_<*> = PROT=SMTP,PORT=<port>`

This opens a TCP/IP port for receiving mails by the SMTP Plug-In. <port> specifies the number of the port that you should use. This must not be occupied by any other program on this host (for example, Sendmail usually uses port 25). If no mails (including status notifications) are to be received in this SAP system, <port> can be set to 0.

You can use the TIMEOUT option to define a maximum wait time for a response from the mail server (in seconds).

- `is/SMTP/virt_host_<*> = <host>:<port>,<port>,....;`

This defines a "virtual mail host" for receiving mails. If all incoming mails (including status notifications) are to be received and processed in a single client of this SAP system, this parameter is not required (an entry `is/SMTP/virt_host_0 = *.*:` is then assumed by default). If you want several clients to be able to receive, you must create a virtual mail host for every client. <host> specifies the name of the host to which incoming mails are addressed. The "*" value can also be specified here if the mail distribution is to occur independently of the addressed host. Important: If the mail is to be distributed according to host names, you must assign different IP addresses to these host names. <port> specifies the number of a port to which incoming mails are addressed. Several ports may be specified for each host, and several hosts (with several ports if necessary) may be specified for each virtual mail host. Important: The parameter line must always be completed with a semicolon (even if only one host is involved).

The assignment of virtual mail hosts to clients is carried out in the SAP system

→ Example.

With two clients capable of receiving mail, the profile parameters could read as follows.

```
icm/server_port_0 = PROT=HTTP,PORT=1080
icm/server_port_1 = PROT=HTTPS,PORT=1443
icm/server_port_2 = PROT=SMTP,PORT=25000,TIMEOUT=180
icm/server_port_3 = PROT=SMTP,PORT=25001,TIMEOUT=180
is/SMTP/virt_host_0 = *:25000;
is/SMTP/virt_host_1 = *:25001;
```

In RZ10 – Instance Profile.

If you have more than one App. Server then supply the parameter in each of the App. Server.

<code>icm/host_name_full</code>	<code>sap.srvr.host.name</code>
<code>is/SMTP/virt_host_1</code>	<code>*:25001;</code>
<code>is/SMTP/virt_host_0</code>	<code>*:25000;</code>
<code>icm/server_port_3</code>	<code>PROT=SMTP,PORT=25001,TIMEOUT=900</code>
<code>icm/server_port_2</code>	<code>PROT=HTTPS,PORT=1443,TIMEOUT=900</code>
<code>icm/server_port_1</code>	<code>PROT=SMTP,PORT=25000,TIMEOUT=900</code>
<code>icm/server_port_0</code>	<code>PROT=HTTP,PORT=1080,TIMEOUT=900</code>

Step 2. Setup a User in the System

User administration transaction SU01

System user

In each client of an SAP system in which incoming mails (or status notifications for sent mails) are to be received, a system user must be created to process the incoming messages. To do this, use transaction SU01 to create a user of the type "system", and assign the "S_A.SCON" profile to this user.

User addresses

Each individual user who wants to receive e-mails in an SAP system needs an Internet mail address. This is also used as a sender address for sending e-mails. In transaction SU01, enter the Internet mail address of a user in the field "E-Mail" under "Address". As a domain, use the domain of the SAP system client. As an example "firstname.lastname@crm-prod.company.com".

The screenshot displays the SAP User Administration (SU01) transaction. At the top, the 'User' field contains 'YOH EXCHANGE'. Below it, 'Last Changed On' is 'MOHAMMY' on '10.06.2008' at '08:55:48', and the 'Status' is 'Saved'. A tabbed interface at the top includes 'Address', 'Logon data', 'SNC', 'Defaults', 'Parameters', 'Roles', and 'Profiles'. The 'Person' section contains fields for Title, Last name (Yoh), First name (Exchange), Academic Title, Format (Exchange Yoh), Function, Department, Room Number, Floor, and Building. The 'Communication' section includes Language (English), Telephone, Mobile Phone, Fax, E-Mail (approvals@mail.yohexchange.com), and Comm. Meth (Remote Mail). An 'Other communication...' button is also present. The 'Company' section shows 'Yoh Exchange / /'.

Step 3. Assign the Client to SICF Service “SAPConnect”

For each client of an SAP system in which incoming mails (or status notifications for sent mails) are to be received, and processed if necessary, you must create an SMTP server in which the assignment to a virtual mail host as well as the logon data is defined. In transaction SICF, an SMTP server (envelope icon) should already be available in every SAP system. This is delivered by SAP. Use this for the first client that you want to be able to receive mails, and create a new SMTP server for every other client. You must make the following settings on the SMTP servers:

Host data

For "Profile Parameter Number", enter the sequence number of a parameter is/SMTP/virt_host_<*> from the profile. If you have only one client and did not create such a parameter in the profile, enter 0.

Service data

Enter the client into which the mails received using this virtual mail host are to be directed, as well as the logon data (user, password, language) of the service user that was created for inbound mails.

Make sure that Handler list CL_SMTP_EXT_SAPCONNECT exists.

The screenshot shows the SAP SICF configuration interface for the 'SAPconnect' service. The 'Path' is set to '/'. The 'Service Name' is 'SAPconnect', and it is marked as an 'SMTP Host (Active)'. The 'Default Service' is empty, and the 'Lang.' is set to 'English'. A button labeled 'Other Languages' is visible. The 'Description' section contains three fields: 'Description 1' is 'SAPCONNECT (E)SMTP', 'Description 2' is empty, and 'Description 3' is empty. Below this, there are four tabs: 'Host Data', 'Logon Data', 'Handler List', and 'Administration'. The 'Host Data' tab is selected, showing the 'Host Names and Port Numbers' section. In this section, the 'Profile Parameter No.' is set to '0' (Parameter 'is/SMTP/virt_host_#'). Below this is a 'Host Configuration Information' section with a text area containing '* : 2500'. The text area has a scrollbar on the right and navigation buttons at the bottom.

Path	/	
Service Name	SAPconnect	SMTP Host (Active)
Default Service:		
Lang.	English	Other Languages

Description	
Description 1	SAPCONNECT (E)SMTP
Description 2	
Description 3	

Host Data	Logon Data	Handler List	Administration
-----------	------------	--------------	----------------

Logon Data	
Client	400
User	SMTPCONNECT
Language	English
Password Status	Set

Step 4. Configuration in Transaction SCOT

Make the SAPconnect settings separately in each client from which e-mails are to be sent or received.

Default domain

The domain of this SAP system client is defined here, for example, crm-prod.company.com. It is used for the following purposes:

- o The SMTP Plug-In logs on to the mail server with the domain as ID.
- o The message ID of outgoing mails is created with this domain.
- o If an SAP user who has not entered an Internet mail address in their user master record sends an e-mail, a sender address is generated from the SAP user name and this domain, for example SMITHJ@crm-prod.company.com.

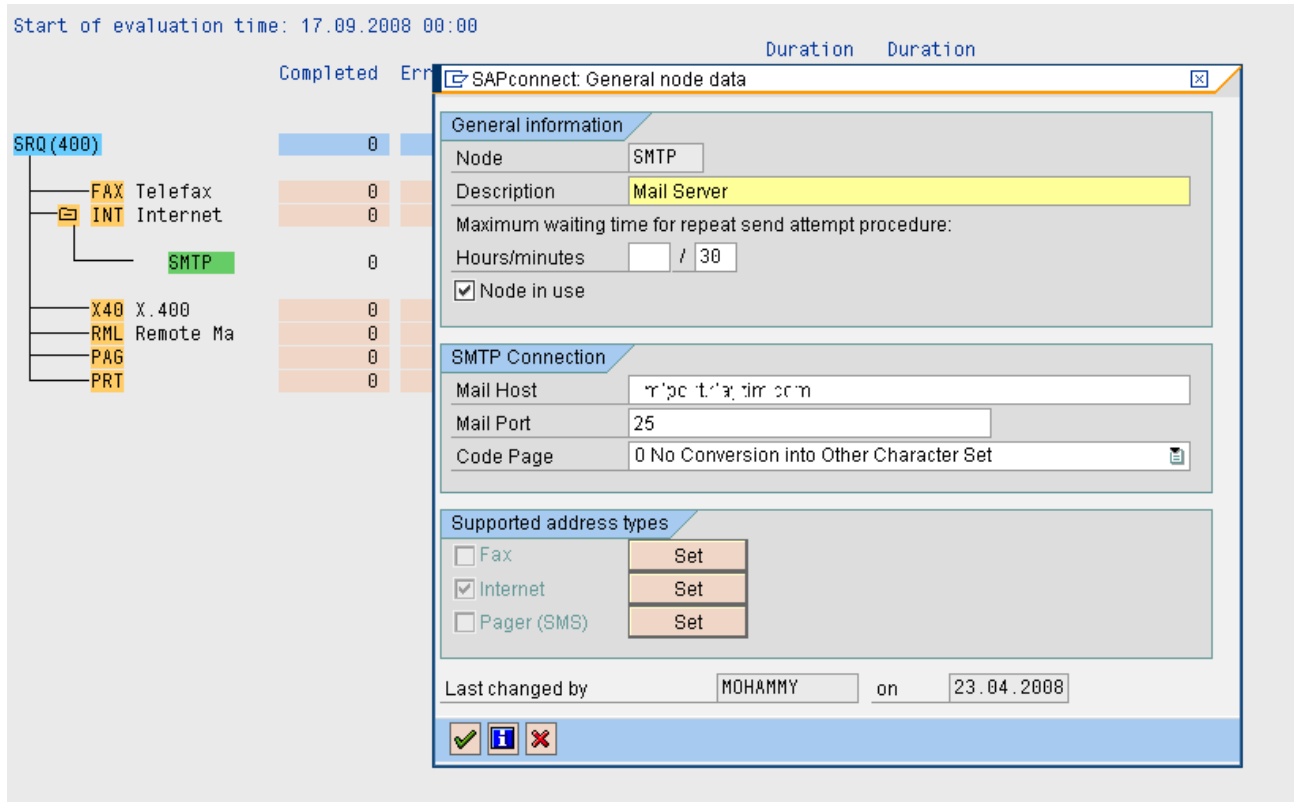
Create SMTP Node

There is always a single SMTP node in each client. It is created automatically by the system and cannot be deleted. It is configured as follows (double-click on the node name):

- o Select "Node in use".
- o Under "Mail Host" and "Mail Port", specify the mail server to which outbound mails are to be transferred.
- o Select "Set" for "Internet".
- o Specify address areas of recipient addresses that are to be reached using these nodes (usually "*" if all e-mails are to be sent using SMTP).

- o For "Output Formats for SAP Documents", the following is recommended:

SAPscript / Smart Forms	PDF
ABAP List	HTM
Business Object / Link	HTM
RAW Text	TXT



Schedule Send-Jobs.

Within SAPconnect administration (SCOT) Proceed as follows:

- o Choose "View" --> "Jobs". Check whether a job is already scheduled (displayed as a calendar icon).
- o Choose "Job" --> "Create", and specify a job name.
- o Place the cursor on the "SAP&CONNECTALL" variant, and choose "Schedule Job".
- o Choose "Schedule periodically".
- o Specify a time interval (for example, 10 minutes), and choose "Create".

Receiving

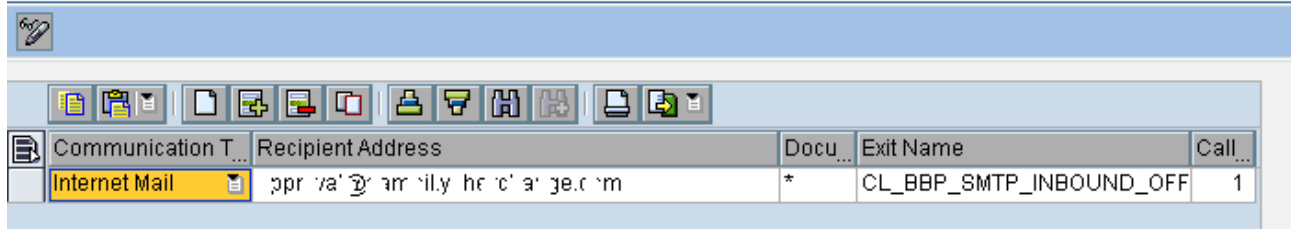
With the settings made so far, SAP users can already receive e-mails in their inbox in the Business Workplace (transaction SBWP) at the address entered in the user master record. If, on receipt of e-mails to a specific address or with specific contents (for example XML documents), you want a program that processes these e-mails to start automatically, you can configure this under "Settings" --> "Inbound Processing".

If, on receipt of e-mails to a specific address or from a specific sender, you want these to be directed automatically to another recipient or a distribution list, you can configure this under "Settings" --> "Inbound Distribution".

Step 5. Define Exit Rules for Inbound Processing (Transaction SO50).

Inbound processing should be defined so that incoming messages can be routed appropriately.

Exit Rules for Inbound Processing (Maintenance Mode)



Communication T...	Recipient Address	Docu...	Exit Name	Call...
Internet Mail	*prva'@amillyh.co'ange.com	*	CL_BBP_SMTP_INBOUND_OFF	1

Note: - In order to implement successfully and fully offline approvals, there are other functional Network related steps and configuration that are necessary, as example, Setup of following jobs which retrieves messages.

→ CREATE BID INVITATIONS

→ RBBP_NOTIFICATION_OFFAPP

→ RBBP_OFFLINE_EVAL

Step 6. Defining Routing Rules on E-mail Server.

Settings on the mail server (SAP-external configuration)

To be able to receive mails in the SAP system, you need to set your mail server so that certain mail addresses are forwarded to one or several SAP systems or clients. For this purpose, you need to define routing rules that assign a mail host and/or port to address areas (generic address parts, usually the domain), for example:

*@crm-prod.company.com --> SAPWASHost:25000

*@crm-test.company.com --> SAPWASHost:25001

You can define routing rules, example in Proof-point which diverts the messages on a particular port to email address that you would choose to create.

Related Content

<http://help.sap.com/search/highlightContent.jsp>

http://help.sap.com/saphelp_nw70/helpdata/EN/55/a8b538891b11d2a25a00a0c943858e/frameset.htm

http://help.sap.com/saphelp_nw70/helpdata/EN/55/a8b538891b11d2a25a00a0c943858e/frameset.htm

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